diverse and curious phenomena met with in cancer." "Cancer is caused by the infection of a body cell, and there are therefore as many kinds of cancer as there are different kinds of body cells."

The major source of infection by the cancer germ is considered to be from the soil and through foods. Thus, care in what we put into our stomachs is considered the first line of defense in the prevention of cancer.

In addition to developing his unique and unproved hypothesis, Dr. Abelmann emphasizes the need of early diagnosis, public education and periodic examination. He suggests that a national cancer day should be set aside to make the public cancer-conscious.

DIMENSIONAL ANALYSIS FOR STUDENTS OF MEDICINE. By Harold A. Abramson, M.D., Assistant Clinical Professor of Physiology, Columbia University. The Josiah Macy, Jr., Foundation, 565 Park Avenue, New York 21, 1950, 41 pages, \$1.00.

A sharp tool is a terrible temptation—for instance, mathematics. As a former sinner, the reviewer sympathizes with Dr. Abramson, but unhappily the author's dimensional analysis and sympodism and psychomotive forces are not impressive. His introductory statement, "No amount of purely mathematical reasoning can ever take into consideration the complexity of the emotional factors," may some day prove exaggerated, in consequence of vector analysis; but even granting the power of mathematics, this reviewer is not a bit converted to Dr. Abramson's eagerness to pump that kind of reasoning into psychiatrists.

Students of medicine, to all of whom Dr. Abramson directs his book, will (1) as a body prefer to work at the care of patients, or (2) if in research medicine, prefer fuller treatment of the subject, such as Griffin's "Mathematical Analysis" and Fisher's "Statistical Methods for Research Workers."

METHODS IN MEDICINE—The Manual of the Medical Service of George Dock, M.D., Sc.D., Formerly Professor of Medicine, Washington University School of Medicine; Formerly Physician-in-Chief, Robert A. Barnes Hospital, St. Louis. A Comprehensive Outline for Clinical Investigation, Management and Treatment of Patients with Various Medical Disorders. By George R. Herrmann, M.D., Ph.D., Professor of Medicine, University of Texas Medical Branch at Galveston. Second edition, completely revised. 488 pages. The C. V. Mosby Company, St. Louis, 1950. \$7.50.

This book is presented as a practical bedside guide for the clinical investigation of the common as well as some of the more rare medical conditions. It is intended for interns, residents, and practitioners, and details what the author considers minimal requirements for diagnostic study and medical management. Dr. Herrmann calls it a revision of the manual which he published 26 years ago, but actually it is a new book. Despite this the author, unfortunately, has hung on to certain items which, though useful in 1925, are of historical interest only in 1951.

The book has both good and bad points. It can be very handy as a compendium, listing a variety of information in its contents. It includes data on methods of history and physical examination, laboratory procedures and therapeutic methods. The material shown has very definite interest, but the reviewer finds himself not infrequently at a loss to explain why some items are in and others out. For instance, in a short summary of antibiotics, such a little-used one as Nisulfazole is given mention in the quite limited space available. The bibliography is also spotty: References are given for the management of renal stones and peripheral vascular disease, but none for irritable colon, nephritis or rheumatoid arthritis. Some of the methods are followed through thoroughly, but many others end up in a blind alley. In this regard one may mention the discussions on biopsy of muscle

(page 163) and on the technique for counting peripheral blood (pages 44-48). If one did not already know the techniques, he would have to look further than this book.

The style is very authoritative, which may irritate some readers, particularly when statements are inaccurate; for example, on page 277 the author states that the Takata test "has been found to be positive in any disease in which the serum globulin is over 3 per cent" (an erroneous conclusion of the year 1934).

The book cannot be recommended to the practitioner to employ for casual reference or detailed investigation on a given case. On the other hand, in a hospital which may adopt it as a methodology, it has a field of usefulness as a vade mecum for the intern.

SKULL FRACTURES AND BRAIN INJURIES. By Harry E. Mock, M.D., Consulting Surgeon, St. Luke's Hospital, Chicago, Associate Professor Emeritus of Surgery, Northwestern University Medical School. The Williams and Wilkins Company, Baltimore, 1950. 806 pages. \$13.50.

A very comprehensive review of head injuries, skull fractures and brain injuries, written from the standpoint of the general surgeon. The author has had a most extensive experience in the management of head injuries and presents a very complete account of his wide experience. Since the vast majority of head injuries are seen by those other than neurosurgeons, this volume represents an excellent addition to the library of every practicing physician.

It is written in too great detail to be used as a textbook, but can be heartily recommended as a complete source of reference concerning the diagnosis, management and complications of head injuries. Dr. Mock presents a plan of management of these patients which, if adequately followed, no doubt would result in a definite lessening of mortality from such injuries. Many controversial points are discussed, and included therein are the views of numerous specialists in neurological surgery.

THE CLINICAL USE OF RADIOACTIVE ISOTOPES. By Bertram V. A. Low-Beer, M.D., Associate Professor of Radiology, University of California Medical School, San Francisco, Calif. Charles C. Thomas, publisher, Springfield, Illinois, 1950. \$9.50.

Part One, 128 pages, concerns physics, measurements, and radiation hygiene, with seven tables and 27 figures, a list of 43 books, and references to 40 authors, not keyed into text. Part Two, clinical applications, fills the rest of the book, including bibliography of 11 books and 327 references keyed into text. There is also an appendix of useful factual data and dosage computations and an extensive table of isotopes. The index is fairly detailed, occupying 25 columns, and omits authors. This part has 58 figures, also four pages of color plates concerning the author's investigation of P<sub>32</sub> on blotting paper for treatment of skin lesions. Many of the figures are graphs, which with 34 tables give a good quantitative understanding.

This volume, in contrast to so many "edited" textbooks recently published, is all by one hand, which gives it a good unity of treatment. The coverage is very broad. The numerous clinical investigations with tracers and for therapy are grouped under the isotope concerned (12 elements). Therapy with P<sub>32</sub>, Na<sub>24</sub>, I<sub>131</sub> and Co<sub>66</sub> is covered in a chapter of 65 pages, preceded by 16 pages on the computation of internal dosage. The author is a practitioner of radiation therapy of long and wide experience, with a thorough grounding and containing professional contacts for nuclear physics and radiobiology. This wedding of theory and clinical experience in the one mind gives the book an unusually firm foundation. With the advances attained already and the bright future promise of radioisotopes in clinical medicine, every radiologist would do well to read this book and keep it handy.

It is a serious duty to be prepared to take proper part in isotope committees as they are being set up in more and more hospitals so as to take advantage of the availability of these valuable tools (isotopes) through the Atomic Energy Commission. The fact that the science and art is moving fast, and that the book will soon be outdated, does not lessen its present usefulness.

CHECK—Community Health Educator's Compendium of Knowledge. By Clair E. Turner, A.M., Ed.M., D.Sc., Dr.P.H., Professor of Public Health Emeritus, Massachusetts Institute of Technology. The C. V. Mosby Company, Baltimore. 1951. 266 pages. \$3.00.

If some bright and enterprising surgeon with an encyclopedic memory, photographic mind, and years of successful experience would pack into a small reference-size manual of 225 pages the essentials of the basic sciences as they apply to the surgical art, the psychological and physical characteristics of the patient, important diagnostic criteria and surgical indications, briefly outline the technique covering the major procedures, and at the same time append a wealth of social material, that author would do for surgery what Professor Clair E. Turner has done for the art of health education.

This neat little volume in a board binding with the catchy title, "Check," cannot be summarized, abridged, or abbreviated, because it is pure essence in itself. The author presents his ideas in three parts: Part One, Basic Principles; Part Two, Working with People; Part Three, Media of Group Communication. In addition, there are a useful appendix and a helpful bibliography.

While Professor Turner presents his material from the standpoint of one primarily interested in public health education, and while the activities described and the factual material contained are directed toward that end, he calls upon a basic knowledge of the human individual and the manner in which that individual reacts under different circumstances to propose a method of leading him into a favorable acceptance of new ideas concerning his own health and the environment that contributes to it in such a comprehensive manner that the techniques described would be equally applicable to any phase of human relations.

equally applicable to any phase of human relations.

Part One, "Basic Principles," deals with the nature of community health education, the development of public health education and the scope of health education, and outlines where health education occurs. The functions, personal qualifications and techniques of the community health educator are indicated. As a part of this latter discussion, a job performance check list is presented consisting of a group of requirements that could well be imposed upon a worker in any field of endeavor. Just a few of these will illustrate the kind of thinking involved:

Carries assignments through to completion.

Carries out assignments promptly.

Organizes work well.

Makes accurate analysis of situations.

Discriminates between essentials and nonessentials.

Is capable of meeting emergencies.

Keeps up to date on improved techniques and procedures in work.

Accepts responsibility for errors of own making.

Chapter VI of Part One, entitled "Motivation," states that public health education is concerned primarily with the development of attitudes and actions and presents a series of reasons as determined by experience why individuals do and do not accept a program of hygienic practices. On page 37 of this same chapter, fundamental human wants are analyzed and the health educator is advised to build his

program in such a way as to appeal to these basic human wants. "Health is an abstraction. To the sick it means freedom from the distressing symptoms of disease. To the well person and the general public its value is primarily what it enables one to be, to do, and to acquire." The four categories to which appeal is made are:

- 1. The want for a feeling of personal worth.
- 2. The sex want (the family and the race).
- 3. The want for a livelihood (fear of being poor).
- 4. The want for variety.

In Part Two is presented a wealth of material on the techniques of working with people. This is outlined step by step beginning with the individual conference, proceeding to group thinking, covering general meetings and community organizations and campaigns. The importance of the individual and his own personality in presenting appealing ideas to other individuals and to groups is emphasized. Suggestions are made as to the kind of approaches most likely to succeed and those doomed to failure.

Part Three, "Media of Group Communications," is more specific in its analysis of the available media of communicating ideas. The principles underlying group communications are elaborated. Skillful writing, effective speech, radio and television, newspapers, printed matter, magazines, books, letters and questionnaires, pictures and graphs, motion pictures and exhibits, all receive technical evaluation even to the point of instructions as to how to read and correct a galley proof or as to what constitutes the best type of halftone for reproduction.

The style and mode of this compendium are indeed different and original with the author. After reading and thoroughly enjoying Professor Turner's "Check," your reviewer was faced with just one question: Have we in medicine been too busy, too stupid, or just too lazy so that it has been necessary for a layman to take the lead in an activity which primarily should be our responsibility?

TEXTBOOK OF PHYSIOLOGY AND BIOCHEMISTRY. By George H. Bell, B.Sc., M.D. (Glasg.), F.R.F.P.S.G., F.R.S.E., Professor of Physiology in the University of St. Andrews at University College, Dublin; J. Norman Davidson, M.D., D.Sc. (Edin.), F.R.F.P.S.G., F.R.I.C., F.R.S.E., Gardiner Professor of Physiological Chemistry in the University of Glasgow; and Harold Scarborough, M.B., Ph.D. (Edin.), F.R.C.P.E., Professor of Medicine in the Welsh National School of Medicine of the University of Wales. The Williams and Wilkins Company, Baltimore, 1950. 918 pages. \$9.00.

Structural biochemistry without relation to function holds little interest for the medical student or practitioner, or for that matter, for the investigator of the dynamic aspects of medicine. Likewise, physiology without a basis in chemistry is inadequate. The three authors of this book, a physiologist, a biochemist and a clinician, unite their efforts in the production of a skillfully and interestingly written introduction to the subjects of mechanical and chemical physiology. Chapter I is a general introduction with the following opening statement:

"The subjects of Physiology and Biochemistry comprise the study of living matter at two different levels. The biochemist studies biological systems at the molecular and atomic level, while the physiologist is concerned with the intact organ, or the whole organism. Both have a dynamic outlook, and indeed biologists in general at the present time are more interested in the function of living matter than in its structure. Physiologists and biochemists are concerned essentially with changes in the organism as it reacts to changes in its environment."

Another statement in the introductory chapter deserves quoting: